at1124exam: Radicals and Squares (v807)

Question 1

Simplify the radical expressions.

$$\sqrt{50} \qquad\qquad \sqrt{75} \qquad\qquad \sqrt{20}$$

Question 2

Find all solutions to the equation below:

$$6(x-6)^2 + 2 \;=\; 98$$

Question 3

By completing the square, find both solutions to the given equation. *You must show work for full credit!*

$$x^2 + 8x = 9$$

Question 4

A quadratic polynomial function is shown below in standard form.

$$y = 2x^2 - 16x + 27$$

Express the function in **vertex form** and identify the **location** of the vertex.